Name of work:Improvements to Roads and Drains at KNV 2nd Stage Muneshwara Layout in Ward No 10 (Doddabommasandra) Vidyaranyapura Sub Division

Item No	Discription of Item	No	Length	Breadth	Depth	Qty	Unit
1	Earthwork excavation by manual means for roads, drains & similar works in hard soil excavated surface leveled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications. etc., complete as per the directions of the Engineer-in-charge of the work.						
	Desilt						
	Muneshwara Layout						
	3rd Cross Road From RR School Main Road to Dead End						
	LHS						
		1	30.00	0.50	0.40	6.00	
		1	30.00	0.50	0.40	6.00	
		1	30.00	0.50	0.40	6.00	
		1	6.70	0.50	0.40	1.34	
	RHS						
		1	30.00	0.50	0.40	6.00	
		1	30.00	0.50	0.40	6.00	
		1	30.00	0.50	0.40	6.00	
		1	6.70	0.50	0.35	1.17	
	Cross Road						
	LHS	1	30.00	0.50	0.35	5.25	
	RHS	1	30.00	0.50	0.35	5.25	
		1	5.00	0.50	0.35	0.88	
	For New Rcc Drain						
	4th Cross Road From RR School Main Road to Dead End						
	LHS						
		1	30.00	0.90	0.90	24.30	
		1	30.00	0.90	0.90	24.30	
		1	30.00	0.90	0.90	24.30	
		1	30.00	0.90	0.90	24.30	
		1	18.00	0.90	0.90	14.58	
	RHS						
		1	30.00	0.90	0.90	24.30	
		1	30.00	0.90	0.90	24.30	
		1	30.00	0.90	0.90	24.30	
		1	30.00	0.90	0.90	24.30	
		1	14.00	0.90	0.90	11.34	
					Present Qty	**270.21**	**Cum**

ASSISTANT EXECUTIVE ENGINEER
Vidyaranyapura Sub-Division
Bruhath Bengaluru Mahanagara

Smitha .N.L 2/05
Assistant Engineer,
Ward No.10

Asst. Executive Engineer,
Vidyaranyapura Sub division

Name of work:Improvements to Roads and Drains at KNV 2nd Stage Muneshwara Layout in Ward No 10 (Doddabommasandra) Vidyaranyapura Sub Division

Item No	Discription of Item	No	Length	Breadth	Depth	Qty	Unit
2	Removing and refixing stone slabs of drains and pointing in CM (1:3)						
	R&R Slabs						
	Muneshwara Layout						
	3rd Cross Road From RR School Main Road to Dead End						
	LHS						
		1	30.00	0.90		27.00	
		1	30.00	0.90		27.00	
		1	30.00	0.90		27.00	
		1	6.70	0.90		6.03	
	RHS						
		1	30.00	0.90		27.00	
		1	30.00	0.90		27.00	
		1	30.00	0.90		27.00	
		1	6.70	0.90		6.03	
	Deduction Missing Slabs	-60	0.60	0.90		-32.40	
	Cross Road						
	LHS	1	30.00	0.90		27.00	
	RHS	1	30.00	0.90		27.00	
		1	5.00	0.90		4.50	
					Present Qty	**200.16**	**Sqm**

Assistant Engineer 10/05
Ward No.10

Asst. Executive Engineer,
Vidyaranyapura Sub division

ASSISTANT EXECUTIVE ENGINEER
Vidyaranyapura Sub-Division
Bruhath Bengaluru Mahanagara Palike

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Name of work:Improvements to Roads and Drains at KNV 2nd Stage Muneshwara Layout in Ward No 10 (Doddabommasandra) Vidyaranyapura Sub Division

Item No	Discription of Item	No	Length	Breadth	Depth	Qty	Unit
3	Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs, with 20mm and down size graded granite metal coarse aggregates @0.84cum and fine aggregtes @ 0.56cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, ncluding cost of all materials, labour, HOM of machinery, curing complete as per specifications.						
	For New Rcc Drain						
	Muneshwara Layout						
	4th Cross Road From RR School Main Road to Dead End						
	LHS						
		1	30.00	0.80	0.15	3.60	
		1	30.00	0.80	0.15	3.60	
		1	30.00	0.80	0.15	3.60	
		1	30.00	0.80	0.15	3.60	
		1	18.00	0.80	0.15	2.16	
	RHS						
		1	30.00	0.80	0.15	3.60	
		1	30.00	0.80	0.15	3.60	
		1	30.00	0.80	0.15	3.60	
		1	30.00	0.80	0.15	3.60	
		1	14.00	0.80	0.10	1.12	
					Present Qty	**32.08**	**Cum**

Assistant Engineer
Ward No.10

Asst. Executive Engineer,
Vidyaranyapura Sub division

ASSISTANT EXECUTIVE ENGINEER
Vidyaranyapura Sub Division
Bruhath Bengaluru Mahanagara Palike

Name of work:Improvements to Roads and Drains at KNV 2nd Stage Muneshwara Layout in Ward No 10 (Doddabommasandra) Vidyaranyapura Sub Division

Item No	Discription of Item	No of Bars	Cutting Length of Bar	Weight /m in Kgs	Qty	Unit
5	Providing T.M.T steel reinforcement for R.C.C workincluding straightening, cutting, bending, hooking, placing in position,lapping and / or welding wherever required, tying with binding wire andanchoring to the adjoining members wherever necessary complete asper design (laps, hooks and wastage shall not be measured and paid)cost of materials, labour, HOM of machinery complete as perspecifications.Specification No. KBS 4.6.3 TMT Bars Fe-500					
	Muneshwara Layout					
	4th Cross Road					
	LHS					
	Total length=138.00 Mtr					
	Main bar 10mm dia bar @ 125mm c/c					
	0.62kg/mtr					
		1085	2.00	0.62	1345.40	
	Distribution bar 8mm dia @ 125mm c/c					
	0.40kg/mtr	17	138.00	0.40	938.40	
	RHS					
	Total length=134.00 Mtr					
	Main bar 10mm dia bar @ 150mm c/c					
	0.62kg/mtr					
		894	2.00	0.62	1108.56	
	Distribution bar 8mm dia @ 125mm c/c					
	0.40kg/mtr	17	134.00	0.40	911.20	
				Present Qty	**4303.56**	**Kg**
				Present Qty	**4.30**	**Tonne**

ASSISTANT EXECUTIVE ENGINEER
Vidyaranyapura Sub-Division
Bruhath Bengaluru Mahanagara Palike

Assistant Engineer
Ward No.10
12/05

Asst. Executive Engineer,
Vidyaranyapura Sub divisior

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Name of work:Improvements to Roads and Drains at KNV 2nd Stage Muneshwara Layout in Ward No 10 (Doddabommasandra) Vidyaranyapura Sub Division

Item No	Discription of Item	No	Length	B1	B2	Avg Breadth	Depth	Qty	Unit
7	Excavation for roadwork in All types of Soil by Mechanical Means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications. MORTH Specification No.301								
	For Asphalt Road								
	Road Damaged Portion								
	Muneshwara Layout								
	3rd Cross Road From RR School Main Road to Dead End								
		1	4.90	1.20	1.20	1.20	0.23	1.35	
		1	7.10	2.00	1.50	1.75	0.23	2.86	
		1	8.50	1.40	1.30	1.35	0.23	2.64	
	4th Cross Road From RR School Main Road to Dead End								
		1	9.20	1.50	1.30	1.40	0.23	2.96	
		1	6.20	2.30	1.60	1.95	0.23	2.78	
		1	11.20	1.70	1.40	1.55	0.23	3.99	
		1	7.10	1.80	2.10	1.95	0.23	3.18	
							Present Qty	**19.77**	**Cum**

19.76

Assistant Engineer 11/06
Ward No.10

Asst. Executive Engineer
Vidyaranyapura Sub division

ASSISTANT EXECUTIVE ENGINEER
Vidyaranyapura Sub Division
Bruhath Bengaluru Mahanagara Palike

Name of work:Improvements to Roads and Drains at KNV 2nd Stage Muneshwara Layout in Ward No 10 (Doddabommasandra) Vidyaranyapura Sub Division

Item No	Discription of Item	No	Length	B1	B2	Avg Breadth	Depth	Qty	Unit
8	KSRRB M400- Wet Mix Macadam KSRRB M400-17. Providing, laying, spreading and compacting crushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification No. 406								
	For Asphalt Road								
	Road Damaged Portion								
	Muneshwara Layout								
	3rd Cross Road From RR School Main Road to Dead End								
		1	4.90	1.20	1.20	1.20	0.23	1.35	
		1	7.10	2.00	1.50	1.75	0.23	2.86	
		1	8.50	1.40	1.30	1.35	0.23	2.64	
	4th Cross Road From RR School Main Road to Dead End								
		1	9.20	1.50	1.30	1.40	0.23	2.96	
		1	6.20	2.30	1.60	1.95	0.23	2.78	
		1	11.20	1.70	1.40	1.55	0.23	3.99	
		1	7.10	1.80	2.10	1.95	0.23	3.18	
							Present Qty	**19.77**	**Cum**

19.76

Smitha. N
Assistant Engineer 19/06
Ward No.10

Asst. Executive Engineer,
Vidyaranyapura Sub division

ASSISTANT EXECUTIVE ENGINEER
Vidyaranyapura Sub Division
Bruhath Bengaluru Mahanagara Palike

Name of work:Improvements to Roads and Drains at KNV 2nd Stage Muneshwara Layout in Ward No 10 (Doddabommasandra) Vidyaranyapura Sub Division

Item No	Discription of Item	No	Length	B1	B2	Avg Breadth	Depth	Qty	Unit
9	KSRRB 500-1. Cleaning the existing WBM road surface including removing of binding materials and other foreign matter with wire brushes and small picks, sweeping with brooms or soft brushes and finally dusting with old gunny bags and / or compressed air, to receive bituminous treatment including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH specification clause 501								
	For Asphalt Road								
	Road Damaged Portion								
	Muneshwara Layout								
	3rd Cross Road From RR School Main Road to Dead End								
		1	4.90	1.20	1.20	1.20		5.88	
		1	7.10	2.00	1.50	1.75		12.43	
		1	8.50	1.40	1.30	1.35		11.48	
		1	18.20	5.00	4.50	4.75		86.45	
	4th Cross Road From RR School Main Road to Dead End								
		1	9.20	1.50	1.30	1.40		12.88	
		1	6.20	2.30	1.60	1.95		12.09	
		1	11.20	1.70	1.40	1.55		17.36	
		1	7.10	1.80	2.10	1.95		13.85	
		1	20.00	4.20	5.00	4.60		92.00	
							Present Qty	**264.41**	**Sqm**

Assistant Engineer
Ward No.10

Asst. Executive Engineer,
Vidyaranyapura Sub division

ASSISTANT EXECUTIVE ENGINEER
Vidyaranyapura Sub-Division
Bruhath Bengaluru Mahanagara Palike

Name of work:Improvements to Roads and Drains at KNV 2nd Stage Muneshwara Layout in Ward No 10 (Doddabommasandra) Vidyaranyapura Sub Division

Item No	Discription of Item	No	Length	B1	B2	Avg Breadth	Depth	Qty	Unit
10	KSRRB M500-6. Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications. MORTH Specification No. 502								
	For Asphalt Road								
	Road Damaged Portion								
	Muneshwara Layout								
	3rd Cross Road From RR School Main Road to Dead End								
		1	4.90	1.20	1.20	1.20		5.88	
		1	7.10	2.00	1.50	1.75		12.43	
		1	8.50	1.40	1.30	1.35		11.48	
		1	18.20	5.00	4.50	4.75		86.45	
	4th Cross Road From RR School Main Road to Dead End								
		1	9.20	1.50	1.30	1.40		12.88	
		1	6.20	2.30	1.60	1.95		12.09	
		1	11.20	1.70	1.40	1.55		17.36	
		1	7.10	1.80	2.10	1.95		13.85	
		1	20.00	4.20	5.00	4.60		92.00	
							Present Qty	264.41	Sqm

ASSISTANT EXECUTIVE ENGINEER
Vidyaranyapura Sub Division
Bruhath Bengaluru Mahanagara Pa

Suresh N R 6/09
Assistant Engineer
Ward No.10

Asst. Executive Engineer,
Vidyaranyapura Sub division

me of work:Improvements to Roads and Drains at KNV 2nd Stage Muneshwara Layout in Ward No 10 (Doddabommasandra) Vidyaranyapura Sub Division

n	Discription of Item	No	Length	B1	B2	Avg Breadth	Depth	Qty	Unit
	KSRRB M500-17. Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH table 500-10 complete in all respects complete as per specifications.. MORTH Specification No. 507 - using 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen								
	For Asphalt Road								
	Road Damaged Portion								
	Muneshwara Layout								
	3rd Cross Road From RR School Main Road to Dead End								
		1	4.90	1.20	1.20	1.20	0.05	0.29	
		1	7.10	2.00	1.50	1.75	0.05	0.62	
		1	8.50	1.40	1.30	1.35	0.05	0.57	
		1	18.20	5.00	4.50	4.75	0.05	4.32	
	4th Cross Road From RR School Main Road to Dead End								
		1	9.20	1.50	1.30	1.40	0.05	0.64	
		1	6.20	2.30	1.60	1.95	0.05	0.60	
		1	11.20	1.70	1.40	1.55	0.05	0.87	
		1	7.10	1.80	2.10	1.95	0.05	0.69	
		1	20.00	4.20	5.00	4.60	0.05	4.60	
							Present Qty	**13.22**	**Cum**

Assistant Engineer
Ward No.10
6/09

Asst. Executive Engineer
Vidyaranyapura Sub division

ASSISTANT EXECUTIVE ENGINEER
Vidyaranyapura Sub-Division
Bruhath Bengaluru Mahanagara Palike

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me of work:Improvements to Roads and Drains at KNV 2nd Stage Muneshwara Layout in Ward No 10 (Doddabommasandra) Vidyaranyapura Sub Division

Pre measurement recorded on:

Discription of Item	No	Length	B1	B2	Avg Breadth	Depth	Qty	Unit
KSRRB 500-2. Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH specification clause 501								
For Asphalt Road								
Muneshwara Layout								
3rd Cross Road From RR School Main Road to Dead End								
	1	1.00	5.90	5.90	5.90		5.90	
	1	3.80	4.90	4.20	4.55		17.29	
	1	30.00	5.00	4.75	4.88		146.25	
	1	30.00	4.75	4.80	4.78		143.25	143.40
	1	17.00	4.80	4.50	4.65		79.05	
	1	17.20	4.20	4.15	4.18		71.81	
4th Cross Road From RR School Main Road to Dead End								
	1	2.00	6.20	5.75	5.98		11.95	11.96
	1	9.50	5.20	5.30	5.25		49.88	
	1	30.00	4.55	5.05	4.80		144.00	
	1	6.30	5.05	5.10	5.08		31.97	32.00
	1	17.00	4.70	4.30	4.50		76.50	
	1	30.00	5.10	4.60	4.85		145.50	
	1	12.20	4.60	5.40	5.00		61.00	
	1	8.80	4.85	5.00	4.93		43.34	
	1	9.30	5.40	5.70	5.55		51.62	
	1	9.60	5.20	4.40	4.80		46.08	
Deductions						1125.39		
3rd Cross Road								
Man Hole's	-3		(3.142*0.9*0.9)/4				-1.92	
4th Cross Road								
Man Hole's	-4		(3.142*0.9*0.9)/4				-2.56	
						Present Qty	1120.90	Sqm

Smith. N.K
Assistant Engineer 2/10
Ward No.10

Asst. Executive Engineer
Vidyaranyapura Sub division

ASSISTANT EXECUTIVE ENGINEER
Vidyaranyapura Sub-Division
Bruhath Bengaluru Mahanagara Palike

ne of work:Improvements to Roads and Drains at KNV 2nd Stage Muneshwara Layout in Ward No 10 (Doddabommasandra) Vidyaranyapura Sub Division

Discription of Item	No	Length	B1	B2	Avg Breadth	Depth	Qty	Unit
KSRRB 500-7. Providing and applying tack coat using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH/Chapter 5								
For Asphalt Road								
Muneshwara Layout								
3rd Cross Road From RR School Main Road to Dead End								
	1	1.00	5.90	5.90	5.90		5.90	
	1	3.80	4.90	4.20	4.55		17.29	
	1	30.00	5.00	4.75	4.88		146.25	
	1	30.00	4.75	4.80	4.78		143.25	143.40
	1	17.00	4.80	4.50	4.65		79.05	
	1	17.20	4.20	4.15	4.18		71.81	
4th Cross Road From RR School Main Road to Dead End								
	1	2.00	6.20	5.75	5.98		11.95	11.96
	1	9.50	5.20	5.30	5.25		49.88	
	1	30.00	4.55	5.05	4.80		144.00	
	1	6.30	5.05	5.10	5.08		31.97	32.00
	1	17.00	4.70	4.30	4.50		76.50	
	1	30.00	5.10	4.60	4.85		145.50	
	1	12.20	4.60	5.40	5.00		61.00	
	1	8.80	4.85	5.00	4.93		43.34	
	1	9.30	5.40	5.70	5.55		51.62	
	1	9.60	5.20	4.40	4.80		46.08	
Deductions								
3rd Cross Road								
Man Hole's	-3	(3.142*0.9*0.9)/4					-1.92	
4th Cross Road								
Man Hole's	-4	(3.142*0.9*0.9)/4					-2.56	
						Present Qty	**1120.90**	**Sqm**

Suma.NL
Assistant Engineer 2/10
Ward No.10

Asst. Executive Engineer,
Vidyaranyapura Sub division

ASSISTANT EXECUTIVE ENGINEER
Vidyaranyapura Sub-Division
Bruhath Bengaluru Mahanagara Palike